

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P. Dox 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO.   | FILING DATE     | FIRST NAMED INVENTOR       | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|---|-----------------|----------------------------|------------------------|------------------|
| 09/766,711  | 01/22/2001      | Krishnamurthy Vaidyanathan | US 010017              | 2033             |
| 24737   | 7590 04/05/2004 |                            | EXAMINER               |                  |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 |                 |                            | PHU, PHUONG M          |                  |
| BRIARCLIFF MANOR, NY 10510                              |                 |                            | ART UNIT               | PAPER NUMBER     |
|   |                 |                            | 2631                   | 6                |
|   |                 |                            | DATE MAILED: 04/05/200 | 4                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)   |  |  |  |  |
|---|---|--|--|--|--|--|
| Office Action Summary   | 09/766,711  | VAIDYANATHAN,<br>KRISHNAMURTHY   |  |  |  |  |
| •   | Examiner  | Art Unit   |  |  |  |  |
| The MAH INC DATE of this communication and  | Phuong Phu  | 2631   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be tin<br>y within the statutory minimum of thirty (30) day<br>will apply and will expire SIX (6) MONTHS from<br>t, cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status  |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 01 A   | <u>ugust 2002</u> .   |  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ☐ This  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |  |  |  |  |  |
| 3) Since this application is in condition for allowa  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |
| 4) Claim(s) 1-23 is/are pending in the application.   |   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |  |  |  |  |  |
| 5)⊠ Claim(s) <u>9-11</u> is/are allowed.  | )⊠ Claim(s) <u>9-11</u> is/are allowed.   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-3,12-14 and 20</u> is/are rejected.   | ☑ Claim(s) <u>1-3,12-14 and 20</u> is/are rejected.   |  |  |  |  |  |
| 7) Claim(s) <u>4-8,15-19 and 21-23</u> is/are objected t  | ☑ Claim(s) <u>4-8,15-19 and 21-23</u> is/are objected to.   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/o  | r election requirement.   |  |  |  |  |  |
| Application Papers  |   |  |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |   |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>01 August 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.   |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> </ul>   |   | )-(d) or (f).  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |  |  |  |  |  |
| Attachment(s)   |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) Interview Summary  |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Da   | ate atent Application (PTO-152)  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2-4</u> .   | 6) Other:   | atom represent (1 10 100)  |  |  |  |  |

Application/Control Number: 09/766,711

Art Unit: 2631

## **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Vanselow (5,692,016).

As per claims 1 and 12, see figure 3 and col. 6, line 12 to col. 7, line 11, Vanselow discloses a method and associated system wherein the method/system has step/means comprising a synchronization circuit (figure 3) that receives a carrier signal from antenna (1), obtains a coarse frequency estimate from means (11, 12) and obtains a fine frequency estimate from means (5, 10).

As per claims 2 and 13, in Vanselow system, the carrier signal is inherently a signal.

As per claims 3 and 14, Vanselow discloses that the coarse frequency estimate is obtained by locating a pilot signal (known synchronism symbol AFC) on a spectrum of said carrier signal (see col. 6, lines 36-46).

3. Claims 1-3, 12-14 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Scarpa (5,487,186).

As per claims 1 and 12, see figure 1 and col. 5, line 62 to col. 10, line 67, Scarpa discloses a method and associated system wherein the method/system has step/means comprising a synchronization circuit (figure 1) that receives a carrier signal from antenna (102),

Application/Control Number: 09/766,711

Art Unit: 2631

obtains a coarse frequency estimate from means (132, 134, 142) and obtains a fine frequency estimate from means (116, 142).

As per claims 2 and 13, in Scarpa system, the carrier signal is inherently a signal.

As per claims 3 and 14, Scarpa discloses that the coarse frequency estimate is obtained by locating an IF signal on a spectrum of said carrier signal (see col. 8, lines 44-64 and col. 11, line 20-38 and figure 3).

As per claim 20, see figure 1 and col. 5, line 62 to col. 10, line 67, Scarpa discloses a method (figure 1) comprising step (132) of generating a time domain dc estimate and providing said time domain dc estimate to a frequency and phase estimate circuit (134, 142, 112) (specially, see col. 8, line 44 to col. 9, line 26).

4. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Han (5,818,544).

As per claim 20, see figure 4 and col. 6, line 24 to col. 7, line 2, Han discloses a method (figure 4) comprising step (130) of generating a time domain dc estimate and providing said time domain dc estimate to a frequency and phase estimate circuit (114, 102, 150, 160, 120) (specially, see col. 8, line 44 to col. 9, line 26).

## Allowable Subject Matter

- 5. Claims 9-11 are allowed.
- 6. Claims 4-8, 15-19 and 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 09/766,711

Art Unit: 2631

حشخذه بالمستكنه

#### Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 703-308-0158. The examiner can normally be reached on M-F (8:30-6:00) First Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuong Phu Primary Examiner Art Unit 2631

Phuong Phu 03/18/04

PHOUNG PHU PRIMARY EXAMINER